

**WHAT IS CLAIMED IS:**

1. An isolated nucleic acid molecule encoding a variant CD11b  $\alpha$  subunit having the Ile at position 332 replaced with an amino acid selected from Gly and Ala.
2. A isolated nucleic acid molecule encoding a polypeptide consisting of amino acids 144 to 331 of CD11b  $\alpha$  subunit.
3. An isolated nucleic acid molecule encoding a polypeptide comprising amino acids 144 to 332 of CD11b  $\alpha$  subunit wherein the Ile at amino acid 332 has been replaced by an amino acid selected from Gly and Ala.
4. A polypeptide comprising amino acids 144 to 332 of CD11b  $\alpha$  subunit wherein the Ile at position 332 has been replaced by an amino acid selected from Gly and Ala.
5. A polypeptide comprising amino acids 144 to 331 of CD11b  $\alpha$  subunit, the polypeptide not comprising amino acids 332 to 1152 of CD11b.
6. An isolated nucleic acid molecule encoding a variant CD11a  $\alpha$  subunit having the Ile at position 331 replaced with an amino acid selected from Gly and Ala.
7. An isolated nucleic acid molecule encoding a polypeptide consisting of amino acids 144 to 330 of CD11a  $\alpha$  subunit.
8. An isolated nucleic acid molecule encoding a polypeptide comprising amino acids 150 to 331 of CD11a  $\alpha$  subunit wherein the Ile at amino acid 331 has been replaced by an amino acid selected from Gly and Ala.
9. A polypeptide comprising amino acids 150 to 331 of CD11a  $\alpha$  subunit wherein the Ile at position 331 has been replaced by an amino acid selected from Gly and Ala.
10. A polypeptide comprising amino acids 150 to 330 of CD11a  $\alpha$  subunit, the polypeptide not comprising amino acids 331 to 1223 of CD11a.

1 11. A method for determining whether a test compound is a candidate compound for  
2 binding to CD11b, comprising:

3 (a) contacting a test compound with a polypeptide comprising amino acids 144 to  
4 332 of CD11b  $\alpha$  subunit wherein the Ile at amino acid 332 has been replaced by an amino  
5 acid selected from Gly and Ala, and

6 (b) determining whether the test compound binds to the polypeptide,  
7 wherein a compound which binds to the polypeptide is a candidate compound for  
8 binding to CD11b.

1 12. A method for determining whether a test compound is a candidate compound for  
2 binding to CD11a, comprising:

3 (a) contacting a test compound with a polypeptide comprising amino acids 150 to  
4 331 of CD11a  $\alpha$  subunit wherein the Ile at amino acid 332 has been replaced by an amino  
5 acid selected from Gly and Ala, and

6 (b) determining whether the test compound binds to the polypeptide,  
7 wherein a compound which binds to the polypeptide is a candidate compound for  
8 binding to CD11a.

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a1*